

REMARKS

Applicant has amended claims 7, 8 and 9. Only claims 6, 7, 8 and 9 remain in the application. Of the remaining claims, claim 9 was stated to be allowable if an indefiniteness was corrected, which applicant has done . The other remaining claims 6, 7, and 8 were each rejected on Barnes.

Claim 6 describes a system such as shown in applicant's Figure 6, where boxes or other containers (144) move along a defined path and the boxes contain bar codes (140) with dark bar elements and light space elements. A box detecting circuit is constructed to generate a box- detecting signal when the magnitude of output from a laser scanner increases from a low level (B1 in Figure 7) representing no box to above a predetermined level (B3) which represents reflections from a box. The circuit ignores an increase in reflectance that follows a decrease in reflectance that is so brief (e.g. at 152) that it indicates a bar element (130A in Figure 5) or similar thin marking on the box. This avoids a false detection of a box when all that is detected is a dark bar element or similarly thin marking on the box. The box detecting circuit (102) is connected to the very same laser reflection detector (44 in Figure 2) to which the bar code reader (52) is connected. As described in the specification (page 2, lines 8-14), this can avoid the need to provide two supports, one for the box detector and the other for the bar code detector and reader.

Barnes shows a box detector that uses a laser or other source to transmit light 213 (his Fig. 2), with reflections detected by his object detector 212 to detect a box (col. 4, lines 24-27). When he detects a box, he transmits a TRIG signal to a laser scanner 202 to indicate that a box is approaching. The laser scanner 202 has a separate bar code detector assembly with a laser 214 and detector 222

also mount his separate laser <14 and detector <16. Barnes does not describe

taking the output of one of his detecting circuits and using it to both detect a box and detect and read a bar code, or the advantages of avoiding the need to mount two systems. Accordingly, applicant believes that claim 6 should be allowed.

Barnes describes his box ("object") detector in limited detail in column 4, lines 8-44, and the rest of the description appears to be solely of his bar code detector. Accordingly, applicant could not find any description in Barnes that his circuit ignores an increase in reflectance that follows a brief decrease that indicates a bar code is reflecting light. For this reason also, applicant believes that claim 6 should be allowed.

Claim 7, which depends from claim 6, describes the box detecting circuit as indicating detection of a box only when the magnitude of the sudden increase in reflectance remains for at least a minimum time, with only brief drops. This avoids falsely detecting the leading edge of a box when all that is detected is a space element of a bar code that has followed a dark bar element. Since Barnes does not appear to describe his box detector elsewhere than in his column 4, lines 8-44, and this section does not describe the above protocol, claims 7 is not anticipated by Barnes.

Claim 8 describes a system that includes both a barcode reader and a box (container) detecting means that are both connected to a single laser reflection sensor. As discussed above in the case of claims 6, Barnes does not show his box detector 212 connected to the laser reflection sensor 222 that is used to detect and read barcodes. Accordingly, applicant believes that claim 8 is not anticipated by Barnes, and should be allowed.

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In view of the above, favorable reconsideration of the application is courteously requested. If the Examiner should wish to discuss the application, he is invited to call Leon D. Rosen at (310) 477-0578.

Respectfully submitted,



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